(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



PCT

10/522827

(10) International Publication Number WO 2004/013175 A1

SG, SK, TR, UA, US, YU, ZA.

(43) International Publication Date 12 February 2004 (12.02.2004)

(51) International Patent Classification7: C12N 15/27, 15/10, 15/67, 15/72

C07K 14/535,

(74) Agents: HOFER, Dorothea et al.; Prüfer & Partner GbR, Harthauser Strasse 25d, 81545 München (DE).

(81) Designated States (national): AT, AU, BA, BG, BR, CA,

(84) Designated States (regional): European patent (AT, BE,

IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).

CH, CN, CZ, DE, DK, ES, FI, GB, HR, HU, ID, IL, IN, JP,

KR, LT, LU, LV, MK, MX, NO, NZ, PL, PT, RO, RU, SE,

BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU,

(21) International Application Number:

PCT/EP2003/008308

(22) International Filing Date: 28 July 2003 (28.07.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

p-200200188

31 July 2002 (31.07.2002)

(71) Applicant (for all designated States except US): LEK PHARMACEUTICALS D.D. [SI/SI]; Verovskova 57,

1526 Ljubljana (SI).

Declaration under Rule 4.17:

of inventorship (Rule 4.17(iv)) for US only

(72) Inventors; and

(75) Inventors/Applicants (for US only): JEVSÈVAR, Simona [SI/SI]; Vodole 26, 2000 Maribor (SI). MENART, Viktor [SI/SI]; Logatec, Dol 3, 1370 Logatec (SI).

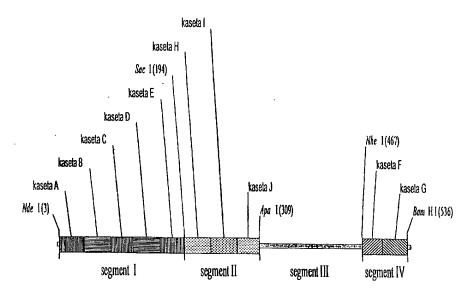
Published:

with international search report

before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SYNTHETIC GENE CODING FOR HUMAN GRANULOCYTE-COLONY STIMULATING FACTOR FOR THE EX-PRESSION IN E. coli



Fopt5

(57) Abstract: The invention relates to the synthetic gene coding for hG-CSF which enables expression in E. coli with an improved expression level of the recombinant hG-CSF regarding the total cellular proteins after expression